



Operator Panel and SCADA for Pumping



HARMONY HMI

Harmony ST6 HMI (Human Machine Interface) is a high-resolution touch screen advanced operator interface for controlling automation systems in various industry operations including Pumping, HVAC (heating, ventilation and air conditioning), Food & Beverage and Packaging. It is particularly suited for operation at pump stations with multiple pumps and motors. The HMI features improved user experience through an intuitive design powered by modern visualization software Ecostruxure Operator Terminal Expert. It is offered as a standard in 12" or 15" display size, and assembled in an enclosure complete with accessories which may include PLCs (programmable logic controllers) depending on the use case. The HMI is compatible with multiple PLC models enabling direct integrations with existing control systems. Salient features include:

- User access management and operation logs ensuring security and traceability.
- Data logging and trend graphs
- Alarm summary with alarm message, type, data and time it was reported or restored.
- Web Viewer function allowing remote monitoring and control from PC/Tablet/Phone
- Aluminium front panel with status LED for signaling operating status
- Communication via Ethernet with Enterprise systems (SCADA, MES and ERP) using OPC-UA protocol.

SPECIFICATIONS

Display Type: Colour TFT LCD 16M Colours

Backlight Lifespan: 50,000 hours white

Rated Supply Voltage: 24Vdc \pm 20%

Memory: 1GB device memory, 512KB backup memory, 128MB user data memory

Integrated connection type: 1 Com Serial RS232, 1 Com Serial RS485, 1 USB 2.0 type A, 1 USB 2.0 micro-B, 2 Ethernet

Processor: ARM Cortex-A8 800MHz

Enclosure material: Polycarbonate

Power Consumption: 18.5W

Touch Panel: Resistive single touch

Ambient Temperature: 0-50°C

IP Protection: IP65 front, IP20 rear

	HMIST6600	HMIST6700
Display	12.1" wide 1,280 x 800 pixels (WXGA)	15.6" wide 1,366 x 768 pixels (FWXGA)
Dimensions (HxWxD) & Weight	235 x 313 x 50 mm, 1.8kg	268 x 412 x 50 mm, 2.7kg

EMSE SCADA FOR PUMPING

Ecostruxure Machine SCADA Expert (EMSE) is a modern and scalable Supervisory Control and Data Acquisition (SCADA) system designed for efficient pump station control and monitoring. The SCADA is deployed on PC Workstations/Servers and accessible from Thin Client stations within the Local Area Network (LAN). Optionally, remote access via the internet can be set up using Virtual Private Network (VPN).

EMSE enables centralized control and real-time monitoring of multiple pump stations. Instantaneous data acquisition from instrumentation allows tracking and reporting on various water parameters including volumes pumped, flow rates, pressure, levels and quality. Integral alarm management ensures prioritized alarm notifications on dashboards and e-mail. Other salient features include:

- Intuitive user interface with customizable dashboards and graphical displays.
- Data Management with secure data logging, storage, and report generation.
- Support of backup or secondary data server for redundancy - used when primary data server is unavailable.
- Multiple security options for thin client access including IP whitelisting, disabling commands and SSL encryption.
- Integration of SQL databases and native drivers for communication with PLCs and enterprise systems (MES, ERP).
- Native OPC interface including OPC UA and OPC DA for data exchange with third party systems.

EMSE is supplied with a perpetual runtime license specified to a maximum tag count (1.5K, 4K, 32K & 64K) complete with one thin client access license. Additional thin client access licenses (HMIEMSETCA) can be purchased to allow access of the SCADA from other computers within the facility intranet and also enable SCADA display on multiple screens in control rooms.

DIGITAL LICENSE	DESCRIPTION	TAGS
HMIEMCERT1KA	EMSE 1.5K Tag RT License	1,500
HMIEMCERT4KA	EMSE 4K Tag RT License	4,000
HMIEMCERT32KA	EMSE 32K Tag RT License	32,000
HMIEMCERT64KA	EMSE 64K Tag RT License	64,000

Upgrade licenses are available for increasing to next Tag count level i.e. 4K, 32K and 64K